Critical Mass
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Financial Inclusion and Gender-Based Literacy Gaps:

Evidence, Recommendations and Programmes to Bridge the Divide

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ABSTRACT

Financial inclusion (FI), the access to affordable, safe and useful financial services for all, has expanded greatly over the last decade. However, increases in bank account ownership across developing countries have disproportionately outpaced actual economic outcomes and the ability to accumulate and build wealth. Additionally, women are disproportionately affected, and the gap persists across every level of education. Interestingly, programs that embed literacy directly into financial services produce measurable gains in wealth accumulation and debit card usage, suggesting greater financial means for underprivileged women. Because commercial capital typically overlooks these disadvantaged communities, philanthropy is uniquely positioned to catalyze positive change towards their financial independence. Ultimately, this paper contends that giving in the financial inclusion space is most impactful when building women's financial capabilities.

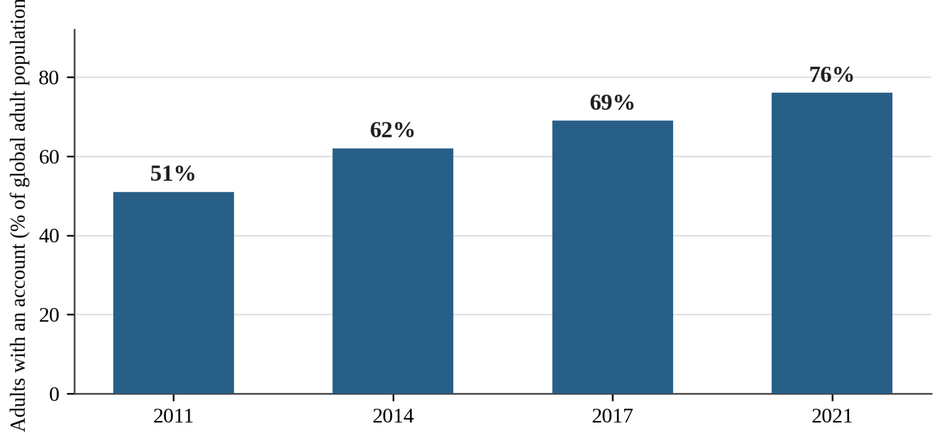
INTRODUCTION

CMV is seeking to partner with and fund organizations and initiatives who are striving to make improvements to financial inclusion globally. From the evidence gathered so far (via peer-reviewed studies in journals, articles, and books), financial inclusion (FI) – or the effort to bring people into the formal financial system through tools like bank accounts, savings, credit, and insurance – has proven to be a broad landscape that is hard to actually define, much less solve. However, after an initial review of the literature surrounding financial inclusion, it is important to define two things. Firstly, understanding FI, particularly in the context of CMV's work, is hugely important. Additionally, within this broader context of financial inclusion, it is important to pick a particular focus area where people and organizations are doing both interesting and impactful work (in a space that is ultimately fundable). This is our premise.

LITERATURE REVIEW

Based on available research, we found that access to financial services and meaningful use of these services are drastically different in the roles they play in financial outcomes. In other words, opening an account for someone is not the same as that person actually using it to manage their money. Over the last decade, bank account ownership has expanded significantly across developing nations. For example, India's "JAM" strategy (in which they linked national biometric identification, state bank accounts, and mobile phones) helped add over 400 million bank accounts. However, the World Bank's 2017 Findex survey (a global study that tracks how adults access and use financial services) estimated that 48% of Indian bank accounts were inactive, implying that "the degree of effective financial inclusion was much less" (Morgan 195). Essentially, nearly half of these new accounts sit unused.

Figure 1. Global account ownership has expanded steadily, 2011 to 2021



Ownership does not guarantee use: 1.4 billion adults remained unbanked in 2021. In India, whose JAM strategy added 411.3 million accounts (through October 2020), 48% of accounts were inactive in 2017.

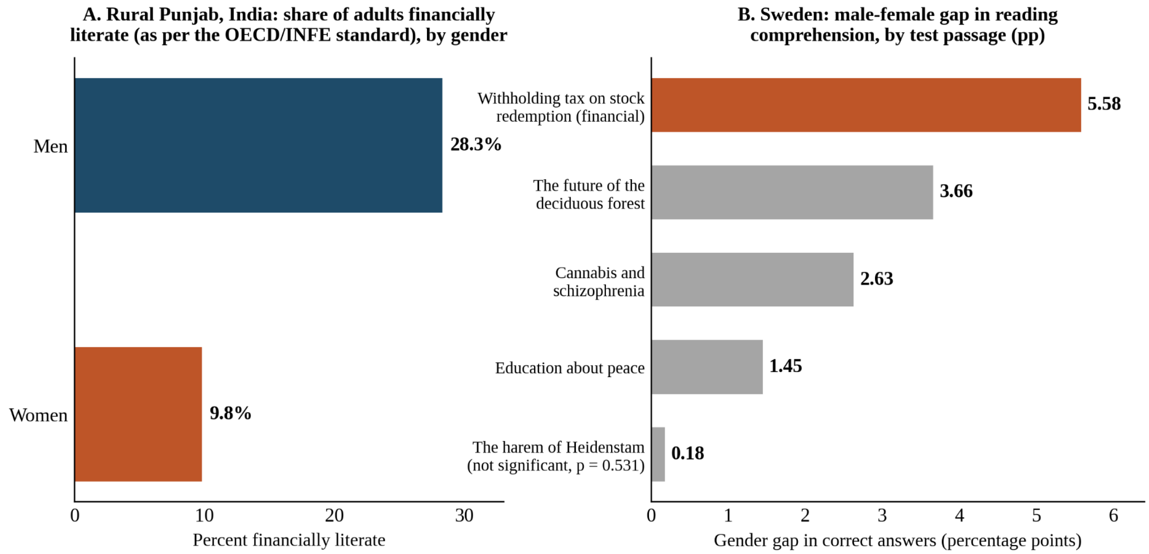
Sources: World Bank Global Findex 2017 and 2021 (global series, unbanked total);
Morgan 2022, p. 195 (India: JAM/PMJDY accounts and 2017 inactivity rate, citing Findex 2017).

The strongest evidence for this distinction comes from research across numerous countries. Using data from 143 countries, Grohmann, Klühs, and Menkhoff find that for basic access, “financial infrastructure and financial literacy are mainly substitutes,” but for actual use of financial services, literacy strengthens the effect of infrastructure (Grohmann et al. 84). To simply get someone an account, more banking infrastructure (like branches and ATMs) is obviously important. But to get that person to actually use the account well, the two have to work together. As the authors explain, “active use of a bank account requires both, infrastructure and understanding about the infrastructure” (Grohmann et al. 85). While building more bank branches gets people accounts, financial literacy helps them save, borrow responsibly, and use these financial products effectively.

However, further research has shown an even more pressing gap. While there is a well-documented gap of financial literacy between women and men globally, this is especially highlighted amongst the world’s poorest communities. This divide between access and engagement is visible at the institutional level as well. In a case study of Spark Microfinance Ghana, where women held savings accounts but rarely used the bank’s mobile voice-response service, the institution “found that there was a 35% gender gap between their male and female users, with only 30% of the women being active users” (Raheem et al. 381). In other words, even when women hold accounts, they engage with financial services at far lower rates than men, precisely the gap that capability-building is meant to close. It is evident that while the gap in account ownership has shrunk significantly, women are systemically disadvantaged. However, it is important to understand why that is the case.

Additional research has shown that the gender gap in financial literacy proves to be resistant to government policy interventions as well, which is a sign of this systemic issue. In a study of rural Punjab, Bansal and Kaur surveyed 500 respondents across three districts chosen specifically to include the state's top, middle, and bottom average literacy scores. Each person was scored on four components of financial literacy: financial knowledge, financial attitude, financial behaviour, and financial mathematical skills. Using the OECD/INFE standard (which requires a 70 percent pass rate on each component to qualify as literate), they found that 28.3% of men but only 9.8% of women were financially literate. However, even more pressing is what fails to close that gap: education, employment, income, and even bank account ownership all raise women's scores, yet don't actually fix the gendered disparities (Bansal and Kaur 99). When a woman is the head of her household and makes familial financial decisions, however, the gap shrinks drastically. This could also indicate that the problem is rooted in women's financial participation (or lack thereof) rather than just education alone. This has proven to be prevalent even for educated women in wealthy countries. In a study of 40,662 Swedish test-takers, Tinghög et al. find a gap even on financial questions involving no numbers, concluding that "stereotype threat contributes to explain why women perform worse compared to men when it comes to financial literacy" (Tinghög et al. 414). In other words, the anxiety of confirming a negative stereotype (i.e. that women are worse with money) can itself drag down their performance, even on a question that requires no math at all. Even in highly educated countries, this gap still exists, proving that expanding access alone will not fix the barriers that women face in this area.

Figure 2. Once access exists, the binding constraint is capability, and it is unequal by gender

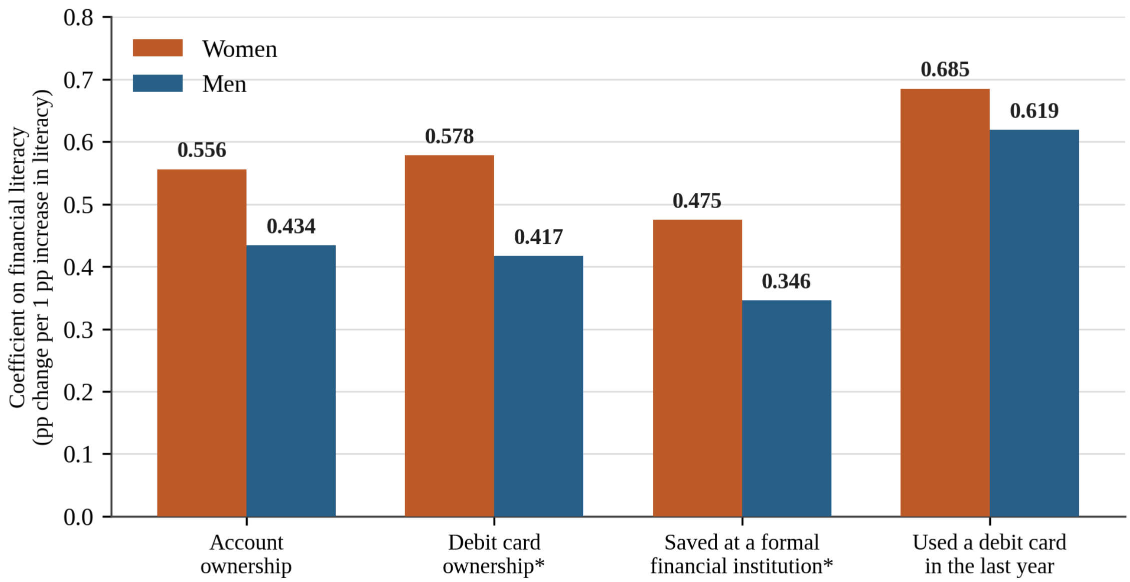


In rural Punjab (500 adults surveyed), 28.3% of men but only 9.8% of women were financially literate. Among 40,662 Swedish test takers, the gender gap in reading comprehension was largest on the one financial passage.

Sources: Bansal and Kaur 2024, Table 10, pp. 95-96 (Panel A, OECD/INFE methodology); Tinghög et al. 2021, Fig. 1 and p. 407 (Panel B).

Grohmann, Klühs, and Menkhoff's study also finds that the coefficient on women's financial literacy "is consistently and considerably larger than the coefficient on the proportion of men who are financially literate," indicating that women may actually benefit more from increased knowledge about financial literacy (Grohmann et al. 92). Put simply, each additional bit of financial knowledge tends to do more for a woman than for a man. In a study of the impacts of financial literacy for women entrepreneurs, Hasan, Ashfaq, Parveen, and Gunardi found that across 144 countries, women entrepreneurs "with a higher degree of digital financial literacy are more likely to engage in formal banking channels" (Hasan et al. 1085); that is, women who are comfortable with digital tools like mobile banking use the formal system more. This pattern holds true on a smaller level as well. In a survey of 820 rural women entrepreneurs in Maharashtra, India, Desai, Sensarma, and Thomas argue that "simply attaching women to the labour market and providing them access to financial resources may not transform their economic well-being" without the actual abilities provided by financial literacy (Desai et al. 243). In fact, they found that financial literacy independently predicts better savings, loan repayment, and insurance uptake, even after controlling for experience, family support, and social networks. Notably, the result holds strong even after the authors conducted instrumental variable regression, where they found that literacy "remains an important determinant of savings, loan repayment and insurance uptake" (Desai et al. 252). In the authors' own words, the findings "call for designing interventions to foster financial literacy among poor women entrepreneurs" (Desai et al. 243).

Figure 3. Financial literacy predicts inclusion more strongly for women, across all four outcomes



*Across 119 countries, the coefficient linking women's financial literacy to each inclusion outcome exceeds the men's in every case. *The gender difference is statistically significant only for these two outcomes, at the 10% level.*

Source: Grohmann, Klühs, and Menkhoff 2018, Table 5, p. 92.

Programs that embed literacy into financial services, particularly for women, have shown meaningful results. The study of Spark Microfinance's plan in Ghana, in which they redesigned a voice-response system (an automated phone service that delivers short financial lessons over the phone, known as IVR) to promote financial literacy for women, concluded that "a significant positive correlation was found between savings balance increases and number of IVR messages listened to" (Raheem et al. 384). Essentially, the more lessons women listened to, the more their savings grew. Meanwhile, BTPN Sharia in Indonesia pairs mandatory literacy training with collateral-free financing (loans that don't require putting up property or assets as security) and group mentorship, and a majority of surveyed customers reported income gains (Rozalinda et al. 9). While many for-profit providers have little incentive to fund these types of programs where client account balances are small, philanthropic capital has huge potential to fill this gap. By funding incentives with the goal of promoting financial literacy for women, CMV has the potential to address a large societal problem and ultimately make steps toward providing a better world for those who need it the most.

RECOMMENDATIONS & CASE STUDIES

Given the data that documents the full scope of financial inequity for women, CMV's funding has a high potential to be impactful while having a tangible benefit to the beneficiary organization(s). The research revealed an important conclusion: access to financial services and having the ability to use them well are different. This is reflected particularly in communities where financial access has grown at a faster rate than the level of education required to truly utilize this ever-evolving technology. Therefore, it is important not to confuse the two when considering organizations to fund; this brings forward a list of criteria that can be used to evaluate an organization's "strength" in terms of long-term potential impact.

These criteria are best understood as a set of filters that narrow a broad field to the organizations where CMV's capital can do genuine work. Firstly, an organization must be action-oriented, directly impacting its client population. Financial inclusion is a field where research can (and most likely will) always evolve. While that research is valuable, more direct avenues to influence change are also needed. Secondly, potential beneficiaries should ideally approach the problem in a genuinely new and unique way. The third is that an organization delivers a tangible benefit to a specific and well-defined group of people. Lastly, and arguably most important, is that CMV's giving should have both a measurable and meaningful impact on the beneficiary organization. In other words, smaller organizations which could create direct change with a grant from CMV have higher chances of creating tangible results.

Current research has shown five organizations which meet that description: Good Return Australia, the Mann Deshi Foundation, Fundación Capital's LISTA initiative, the Cherie Blair Foundation's DevelopHer program, and Frontier Markets India. Ultimately, the goal of this section is to understand how these organizations have been able to create measured, sustainable impact, and understand the principles behind their organizations that are most appealing to potential funders.

These criteria are strongly exemplified in Good Return, an Australian nonprofit working to financially enable marginalized women across Southeast Asia and the Pacific. Their organization takes a multi-faceted approach. Interestingly, they have built an app (My Money Tracker) to help marginalized business owners track both household and business expenses. Beyond its education work, Good Return's microloan programs have funded 11,000 women in small business, and its separate Impact Investment Fund leverages capital from Australian and global investors to guarantee loans for women-led small enterprises that commercial lenders would otherwise decline (Good Return). Additionally, Good Return's CAFE (Consumer Awareness Financial Empowerment) Initiative is focused on contributing to systemic change in underserved communities through designing innovative courses specifically tailored to different groups. This interactive method has already been conducted – as seen earlier, Spark Microfinance in Ghana found that women's savings growth was correlated to the number of financial lessons women actually engaged with (Raheem et al. 384). Ultimately, Good Return is compelling because they seek to address the exact gaps which this paper addresses as being fundamentally important to global equity in the financial inclusion space. Additionally, their methods of doing so show their commitment to the cause they are working towards and their work has shown meaningful results so far.

Another compelling organization is the Mann Deshi Foundation, which targets women's participation in financial decision making in rural India. The literature explains that this exact factor is hugely important in closing the gender gap; as mentioned earlier, Bansal and Kaur found that in rural Punjab, education, income, and even bank-account ownership all raise women's financial literacy scores, yet "the gender gap persists at all the levels of education" (Bansal and Kaur 99). However, one of their main findings was that this gender gap seems to actually close when women head their household in terms of financial decision making. Mann Deshi, whose foundation was established in 1996 and whose cooperative bank (the first both by and for rural women in India) followed in 1997, is built around that exact principle. The bank does not just give women accounts, but rather places them in the position of managing money and running businesses. As a result, over 90,000 women have opened accounts and 67% of their business-school participants have gone on to earn an income. Overall, one of the most important takeaways from the observable work they have done is that when organizations actively promote financial literacy and access through actual participation, their results align with the literature and show genuine societal progression.

The next initiative, developed by Fundación Capital, is called LISTA – a mobile app that builds financial capability for low-income, newly-banked adults (not exclusively women). The app was designed specifically for rural cash-transfer entrepreneurs, designed intentionally to work offline in rural, low-connection areas. Much of their mission is comparable to other organizations in terms of their goals to better financial inclusion globally. Notably, they are the only shortlisted organization to have experimented with a randomized control trial. The research, published in the

National Bureau of Economic Research, found that Fundación Capital's approach to addressing financial inclusion had significant positive impacts on financial knowledge, attitudes toward formal services, and financial outcomes, especially for women. Fundamentally, the impact of their work is undoubtedly significant and shows strong proof of concept for the types of work CMV can fund in the financial inclusion space.

Interestingly, The Cherie Blair Foundation's DevelopHer program delivers a similar model through a similar channel but a different geography. Its HerVenture app, which has supported over 100,000 women to date, provides self-paced, easy-to-consume business and money-management lessons to women running micro and small businesses in low-and middle-income countries, and the DevelopHer partnership pairs that app with the Foundation's Mentoring Women in Business program. This is a similar replica of the interventions the evidence suggests are impactful. In Indonesia, BTPN Sharia pairs mandatory literacy training with collateral-free financing and ongoing group mentorship, and a majority of surveyed customers reported income gains (Rozalinda et al. 9); DevelopHer combines mobile literacy delivery with structured mentorship in the same way. The principle it illustrates is the pairing of self-paced digital literacy with human mentorship, which is a consistent theme of what the strongest programs have in common; DevelopHer has turned that combination into a scalable, women-focused, platform. Currently, the app is available in Vietnam, Indonesia, Kenya, Guyana, South Africa, and Nigeria, but they have plans to continue expanding. Their current geographical outlook is important to note, however, because their cross-continental approach shows their desire to expand globally. Another factor important to note is their partnership with Qualcomm, who assisted in actually developing the app; in other words, their access to partnerships with large companies is worth considering.

Lastly, Frontier Markets India is another organization to include in this case study – particularly because their approach helps CMV adjust the scope of potential grant recipients. Frontier Markets is a women-led social commerce platform that invests in rural women entrepreneurs to reach underserved communities in India, with partnerships including the Mastercard Center for Inclusive Growth. This reach is important to consider, especially because potential partnerships could lead to broader collaboration with institutions such as Mastercard and may help CMV grow its reach in the financial inclusion sector. While it aligns with CMV's broader mission of women's economic empowerment and reaches a well-defined rural population through women themselves, its primary focus lies more in entrepreneurship and distribution rather than financial literacy specifically. While this is a pivot in some sense, Frontier Markets still lies within the broader umbrella of women's economic empowerment. It is still worth including in the wider context of financial inclusion, as there is much to learn from both their approach and their mission.

Taken together, these five organizations translate the report's findings into an idea of what CMV should be looking for given the funding goals. When evaluated against the criteria, the strongest candidates often are the organizations in which several conditions hold at once: a direct, action-oriented model that builds capability rather than solely expanding access (most clearly Good Return and Mann Deshi), a well-defined population of low-income women, and at a scale at which a CMV grant is meaningful and tangible. Good Return stands out most sharply on this last point, because they show that even modest grants fund concrete outcomes. In addition, its Asia-Pacific footprint matches CMV's geography almost exactly. Mann Deshi and DevelopHer follow closely, each showing a specific idea the literature supports (i.e. human participation as a meaningful intervention as well as literacy lessons and face-to-face mentorship). LISTA and Frontier Markets are best understood not as immediate targets but as boundaries to understand the CMV scope. LISTA provides proof that the capability-building model works, even if its geography sits outside CMV's scope, while Frontier Markets marks the point at which women's economic empowerment meets financial literacy.

Ultimately, the value of examining these organizations side by side is that it allows CMV to gain a broader understanding of the landscape around financial inclusion and financial literacy. Where organizations are building solutions for women who need it the most is where CMV can have the most impact, and by directly funding initiatives that are striving to make direct and tangible changes, CMV will be able to have the impact that it has set out to achieve.

WORKS CITED

Bansal, Deepty, and Lavneet Kaur. “Financial Literacy and Gender Gap: A Study of Punjab State of India.” Journal of Social and Economic Development, vol. 26, 2024, pp. 77–101.

Desai, Ashish Dattaram, Rudra Sensarma, and Ashok Thomas. “Roles of Financial Literacy and Entrepreneurial Orientation in Economic Empowerment of Rural Women Entrepreneurs.” Oxford Development Studies, vol. 52, no. 3, 2024, pp. 243–260.

Grohmann, Antonia, Theres Klühs, and Lukas Menkhoff. “Does Financial Literacy Improve Financial Inclusion? Cross Country Evidence.” World Development, vol. 111, 2018, pp. 84–96.

Hasan, Rashedul, Muhammad Ashfaq, Tamiza Parveen, and Ardi Gunardi. “Financial Inclusion – Does Digital Financial Literacy Matter for Women Entrepreneurs?” International Journal of Social Economics, vol. 50, no. 8, 2023, pp. 1085–1104.

Morgan, Peter J. “Fintech and Financial Inclusion in Southeast Asia and India.” Asian Economic Policy Review, vol. 17, no. 2, 2022, pp. 183–208.

OECD/INFE (2016) International survey of adult financial literacy competencies. https://www.oecd.org/finance/oecd-infe-survey-adult-financial-literacy-competencies.html.

Raheem, Salma, Atta Addo, Samah Shaffakat, and Dana Lunberry. “Designing for Financial Inclusion in Developing Countries: Digital Financial Service for Low-Income Women in Ghana.” The Information Society, vol. 40, no. 5, 2024, pp. 376–394.

Rozalinda, Yenti Afrida, Irwan Abdullah, Zaenuddin Hudi Prasojo, Muthia Ulfah, Putri Ananda Saka, and Jumni Nelli. “Economic Empowerment of Unbanked Women through Financial Inclusion in Indonesia.” Cogent Business & Management, vol. 11, no. 1, 2024, article 2407921.

Tinghög, Gustav, Ali Ahmed, Kinga Barrafrem, Thérèse Lind, Kenny Skagerlund, and Daniel Västfjäll. “Gender Differences in Financial Literacy: The Role of Stereotype Threat.” Journal of Economic Behavior and Organization, vol. 192, 2021, pp. 405–416.